



# Empathy in adolescent girls with autism; quantity and quality of their reactions

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## Background

### Detection of autism in girls

- Better social skills in girls make it more difficult to detect autism.
- Moreover, girls (without autism) react differently to a person in distress than boys: girls more often offer emotional support; boys more often tend to solve the problem (Banerjee et al., 2006).
- The question is to what extent this also applies to girls with autism.

## Method

194 adolescents (mean age = 11.51 years,  $SD = 14.83$  months). Adolescents with autism (17 girls / 53 boys); recruited via facilities specialized in autism; clinically diagnosed based on extensive diagnostic assessment following DSM-IV-TR criteria, independent of this study. Control group (69 girls / 55 boys); recruited via regular Dutch primary schools and high schools. No differences in age and IQ between groups.

## Measures

The experimenter pretended to hurt herself when closing a binder. The experimenter coded the responses. Participants' reactions were also videotaped. The coding was thus double-checked by using the video's.

### Coding:

1. Attention to the event /experimenter
2. Empathic reaction
3. Reaction to the experimenter's pain (emotion-focused)
4. Offering a solution for the problem (problem-focused).

## Results

- Attention: no differences for Group nor Gender.
- Empathic Reaction: Main effect for Gender only. Girls with and without autism showed a stronger empathic reaction than boys with and without autism.
- Emotion focused: male adolescents gave emotion-focused reactions, but less often than the female adolescents, with and without autism. Girls with autism scored higher than girls without autism.
- Problem-focused: boys with autism gave most problem-focused reactions. Girls with and without autism gave no or rarely problem-focused response.

## Objectives

- We examined the extent to which girls with autism act in line with girls without autism, and react emotion-focused to pain in another person; or whether they show the more male oriented behavior and react more problem-focused.

**Empathic reactions  
in girls with autism to an  
experimenter's pain are similar to  
those by girls without autism;**

**Yet does this also apply to more  
complex stressful situations?**